Solenoid Valves
SV09-24-01
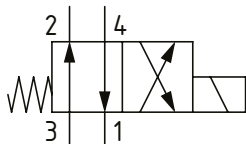
Solenoid Valve, 4-way, 2-position, Spool Type

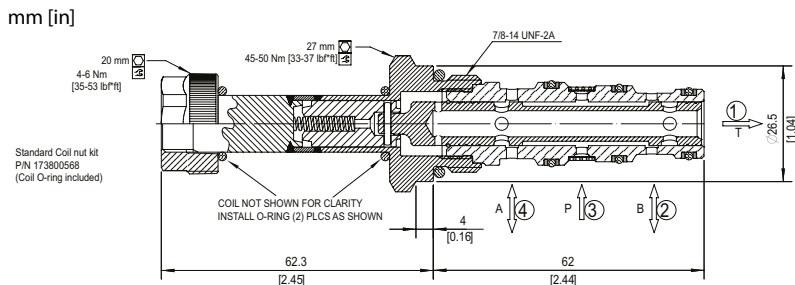**100 bar [1450 psi] • 21 l/min [5.5 US gpm]**

Danfoss

■ OPERATION AND DESCRIPTION

This is a 4-way, 2-position, spool type, direct acting solenoid valve. In the de-energized condition, port 3 is open to 2 and port 4 to 1. When energized, port 3 is open to 4 and port 2 to 1. These valves are used in low pressure, on/off control of dual clutch applications. Always check the operating envelope to make sure the valve will work under the required application conditions.
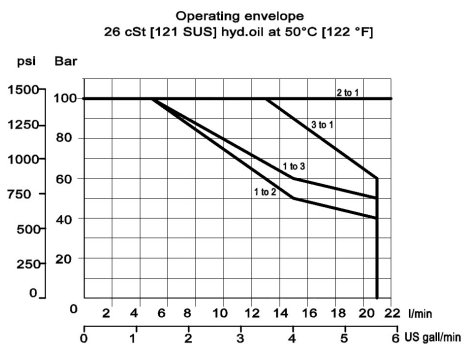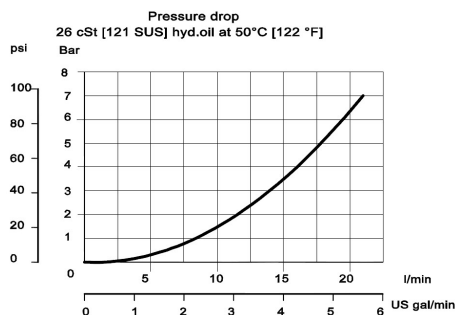
■ SCHEMATIC

■ DIMENSIONS

mm [in]

20 mm
4-6 Nm [35-53 lbf*ft]

27 mm
45-50 Nm [33-37 lbf*ft]

7/8-14 UNF-2A

Standard Coil nut kit
P/N 173800568
(Coil O-ring included)

COIL NOT SHOWN FOR CLARITY
INSTALL O-RING (2) PLCS AS SHOWN

Ø26.5 [1.04]

A④   P③   B②

4 [0.16]

62.3 [2.45]   62 [2.44]

■ PERFORMANCE DATA

Rated Pressure*	**100 bar [1450 psi]**
Flow Capability	**21 l/min [5.5 US gpm]**
Leakage	75 ml/min [5.6 in3/min]
Coil Options	M13, R13
Weight	0.37 kg [0.78 lb]
Cavity	SDC10-4

*Rated Pressure based on NFPA fatigue test standards
(at 1 million cycles)

■ PERFORMANCE CURVES

Pressure drop
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]

Operating envelope
26 cSt [121 SUS] hyd.oil at 50°C [122 °F]

■ MODEL CODE

SV09 - 24 - 01 - **12D** - **DE** - **B** - **F** - **4S**

Coil Voltage

Standard Coil Code	Robust Coil Code	Coil Voltage
00	**R00**	No Coil, nut included*
10D	**R10D**	10 VDC
12D	**R12D**	12 VDC
20D	**R20D**	20 VDC
24D	**R24D**	24 VDC
110A		110 VAC**
220A		220 VAC**

*Standard Coil - Plastic coil nut and o-rings (p/n 173800588)
*Robust Coil - Steel coil nut and no o-rings (p/n 173800539)
**DIN only - external rectifier needed

Connector Type

Standard Coil Code	Robust Coil Code	Connector Type
00	**00**	No Coil
AJ		Amp Junior
AJD		Amp Junior with Diode
AS	**AS**	AMP SuperSeal 1.5
ASD	**ASDB***	AMP SuperSeal with Diode
DE	**DE**	Deutsch
DED	**DEDB***	Deutsch with Diode
FL	**FL**	Flying Leads
FLD	**FLDB***	Flying Leads with Diode
DN		DIN 43650

*Bi-directional diode

Housing

Code	Ports & Material	Housing Model Code
00	No Housing	
4S	#4 SAE, AL	CP08-3-4S
6S	#6 SAE, AL	CP08-3-6S
SE2B	1/4 BSP, AL	SDC08-3-SE2B
SE3B	3/8 BSP, AL	SDC08-3-SE3B

* Aluminum bodies are to be used for pressures less than 210 bar [3000 psi].
* Additional housings available

Filter Option

Omit - Omit
F - 500 µm

Seal Option

Code	Seal kit
B-Buna - N	354001919
V-Viton	354002019